

	Predicted: ZERO	Predicted: ONE	
True Label: ZERO	TN	FP	All True Negatives
True Label: ONE	FN	TP	All True Positives
	All Predicted Negatives	All Predicted Positives	Total

Specificity = $\frac{TN}{TN+FP}$
 % of True Negatives detected correctly
 Specificity is recall for Zero class
FPR = $\frac{FP}{TN+FP}$
 False Positive Rate = 1 - Specificity

Recall = $\frac{TP}{TP+FN}$ = **Sensitivity**
 % of True Positives detected correctly
 a.k.a. True Positive Rate

Accuracy = $\frac{TN+TP}{Total}$
 "All True of All"
 Misclassification Rate = 1 - Accuracy

Precision = $\frac{TP}{FP+TP}$

How precisely can the model predict positives?

- Anti-Spam, Search Engine: optimize for Precision or Specificity
- Fraud, Cancer: optimize for Recall

Helpful

- ROC: Sensitivity vs False Positive Rate

• F1 Score $F1 = 2 * \frac{Precision * Recall}{Precision + Recall}$